

# AQUIFER STORAGE & RECOVERY

## PROJECT BACKGROUND



Aquifer Storage and Recovery (ASR) is a water supply strategy for Austin Water to store available water for recovery and use when needed.



ASR is part of the Austin City Council-approved Water Forward plan, which provides a roadmap for Austin's water future for the next 100 years. Water Forward includes water reuse and conservation strategies along with ASR.



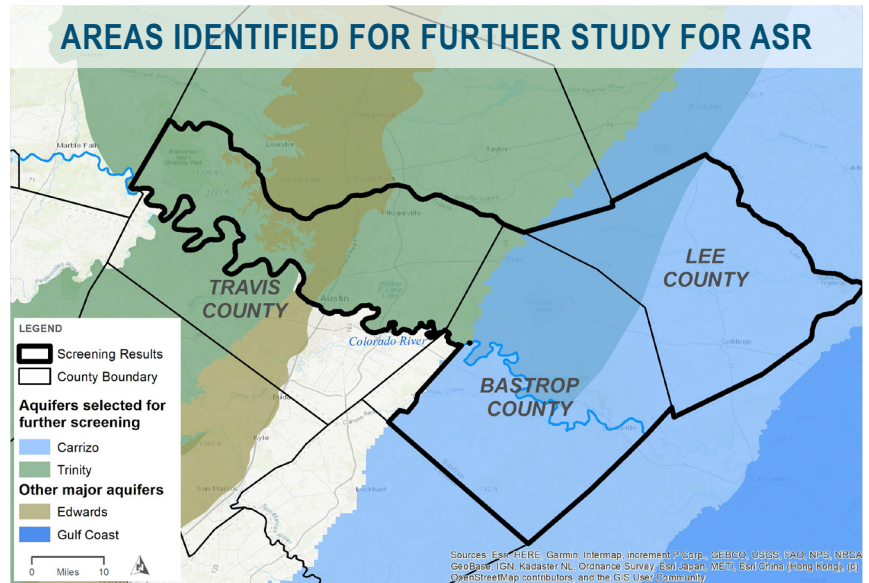
ASR is a key long-term water supply strategy in the Water Forward Plan to address risks due to severe drought and climate change.



Austin Water plans to store 60,000 acre-feet of water by 2040, which is about 38% of Austin's 2022 annual water use. The ASR capacity will be expanded in the future.

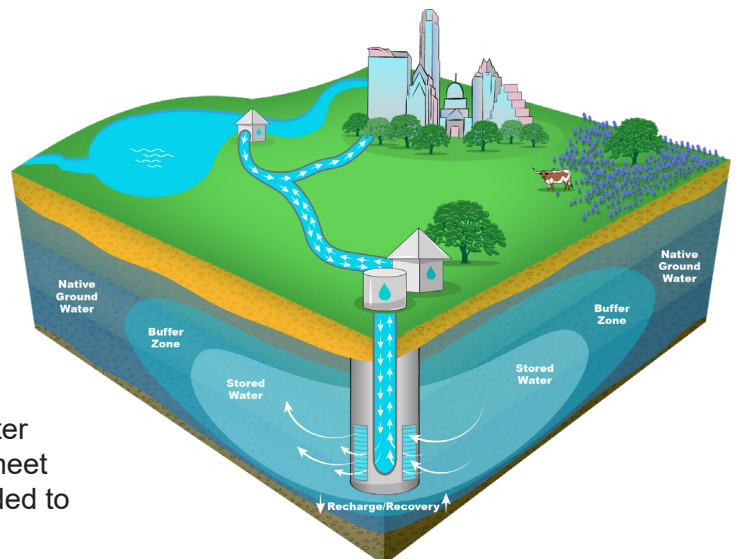


In 2021, Austin Water began a study of aquifers in our region to identify potential sites for an ASR project. Initial results indicate the Carrizo-Wilcox and Trinity Aquifers in Travis, Bastrop, and Lee Counties are most favorable for ASR (as shown in the above map).



## HOW IT WORKS

- When water supplies are plentiful, an ASR will store available drinking water from Austin Water underground in an aquifer.
- Like a savings account, water is deposited into the ASR during wet years so that water can be withdrawn when needed.
- When regular water supplies become low during a drought or during other emergencies, the stored water is pumped out of the aquifer, tested and treated to meet Austin's drinking water standards, and then is provided to customers through pipelines.



## COMMUNITY ENGAGEMENT

- Austin Water values community input from our customers and from neighbors who are located near possible future ASR sites and has dedicated time for community engagement in the project.
- Austin Water is committed to incorporating equity and affordability through the planning and construction of the ASR project, including consideration of strategies to benefit the local communities near ASR infrastructure.



## PROJECT ADVANTAGES



Aquifer Storage and Recovery will make Austin's water supply more resilient through climate change and droughts.



Storing water in a natural aquifer is more cost effective than other similar sized water storage options.



An ASR system can provide a second source of water supply during emergencies.



Water stored in an ASR system would be available under Austin's existing water rights, allowing Austin to maximize local water resources.

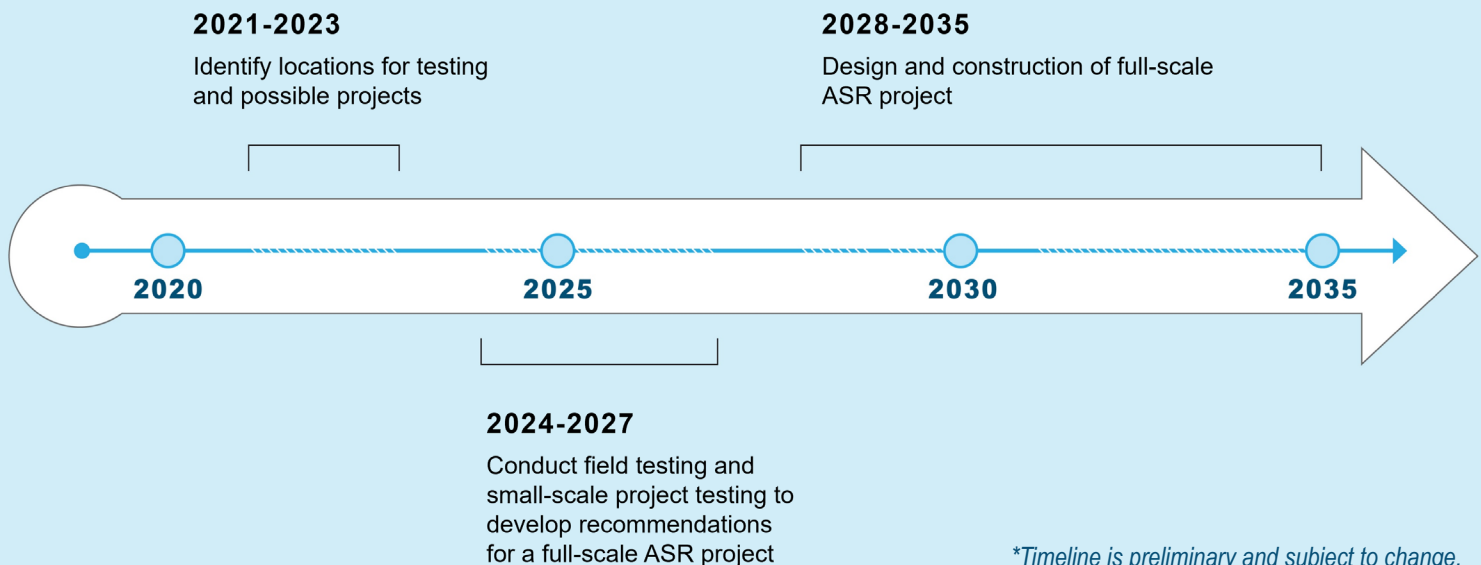


An ASR system can store large amounts of water with minimal disturbance to the land above the aquifer.



Storing water underground in a natural aquifer prevents the high evaporative losses that reservoirs experience in a warm climate.

## TIMELINE\*



*\*Timeline is preliminary and subject to change.*